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		-		U.S. PÁT	ENT DOCUMENTS				
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IM	V	ВI	WO 0025578	Baguisi et al		05/11/20	00	Υ	
					T LITERATURE DOCUMENT	TS			
Exam Initial	s	Cite No.			lication, Volume, Page(s), Date, E				
W	N	Cl		Aige-Gil et al., 1991. Sterilization of avian embryos with busulphan. Res. Vet. Sci. 50:139-144.					
C2 Allioli et al., 1997. Use of g				adal primordial g	erm cells (PGCs) as tools for gene	transfer in chic	kens. Metho	ds Mol. Biol. (	
		C3	Baguisi et al., 1999. Productio	on of goats by som	natic cell nuclear transfer. Nature E	Biotechnology 1	7: 456-461.		
		C4	Baguisi et al., 2000. Induced e	Baguisi et al., 2000. Induced enucleation in nuclear transfer procedures to produce cloned animals. Theriogenology					
	П	C5	Bosselman et al., 1989. Germl	line transmission o	of exogenous genes in the chicken	. Science 243:	533-535.		
		C6	Brazolot et al., 1991. Efficient transfection of chicken cells by lipofection, and introduction of transfected blastodermal cells into the embryo. Mol. Reprod. Dev. 30: 304-312.						
		C7	91:11298-11302.			ale germ-cell transplantation. Proc. Natl. Acad. S			
		C8	Sci. 91: 11303-11307.	1994. Germline transmission of donor haplotype following spermatogonial transplantation. Proc. Natl. Acad. 3-11307.					
		C9	Brinster et al., 1989. No simple solution for making transgenic mice. Cell 59: 239-241.						
		C10	Carsience et al., 1993. Germi embryos. Development 117: 6		kens from dispersed donor blastod	dermal cells and	compromis	ed recipient	
		CII	Chang et al., 1997. Productio International 21: 495-499	n of germline chir	maeric chickens by transfer of cult	ured primordial	germ cells.	Cell Biology	
	Ц	C12			oduced from nonquiescent fetal fil				
		C13			,2-fucosyltransferase in transgenion-mediated cytolysis. FASEB 13		he cell surf	ace carbohydra	
		C14	Cuthbertson et al., 1988. Bio Invest. 58: 484-502.	ology of Disease, T	Fransgenic mice-a gold mine for fo	urthering knowle			
		C15	Ebara et al., 2000. In vivo ger marker. J. Reprod and Dev. 4		icken embryos via primordial gerr	m cells using gro	en fluoresc	ent protein as a	
		C16			o microinjection. p. 233-250. Per	gamon Press.	-	***************************************	
C17 Ebert et al., 1999. Genetic engineering via transgenics and cloning: Prospects, value and environmental imp Interdisciplinary Environmental Review 1: 1-22.  C18 Eyal-Giladi et al., 1976. From cleavage to primitive streak formation: A complementary normal table and a				nental impa	ct.				
				itive streak formation: A complem	entary normal to	ible and a n	ew look at the		
		C19			iol. 19: 321-337. I morphology of the primordial ge	rm cells in the c	hick embryo	o. Anat. Rec. 1	
-	$\dashv$	C20	139-154. Hamburger & Hamilton, 1951	J Morphol 88: 4	9-92				
C20 Hamburger & Hamilton, 1951  C21 Hammer et al., 1985. Producti			L						

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-9	Ŋ	Page 2 of 2
5 20A2	C23	Kubish et al., 1997. Adenovirus-mediated gene transfer by perivitelline microinjection of mouse, rat, and cow embryos. Biol. Reprod. 56: 119-124.
W	C24	Lavitrano et al., 1989. Sperm cells as vectors for introducing foreign DNA into eggs: Genetic transformation of mice. Cell 57: 717-723.
ADEMANN	C25	Love et al., 1994. Transgenic birds by DNA injection. Bio/Technology. 12:60-63.
IN	C26	Maione et al., 1998. Sperm-mediated gene transfer in mice. Mol. Reprod. And Dev. 50: 406-409.
	C27	Matsui et al., 1992. Derivation of pluripotential embryonic stem cells from murine primordial germ cells in culture. Cell:841-847.
	C28	Naito et al., 1998. Expression of exogenous DNA in the gonads of chimaeric chicken embryos produced by transfer of primordial germ cells transfected in vitro and subsequent fate of the introduced DNA. J. Reprod. Fert. 113: 137-143.
	C29	Nakanishi, et al., 1993. Gene transfer in the chicken by sperm-mediated methods. Mol. Rprod. Dev. 36: 258-261.
	C30	Pain et al., 1996. Long-term in vitro culture and characterization of avian embryonic stem cells with multiple morphogenetic potentialities. Development 122: 2339-2348.
	C31	Palmiter et al., 1986. Germ-line transformation of mice. Ann. Rev. Genet. 20: 465-499.
	C32	Park et al., 2000. Derivation and characterization of pluripotent embryonic germ cells in chicken. Mol. Reprod. And Dev. 56: 475-482.
	C33	Perry et al., 1999. Mammalian transgenesis by intracytoplasmic sperm injection. Science 284: 1180-1183.
	C34	Petitte et al., 1990. Production of somatic and germline chimeras in the chicken by transfer of early blastodermal cells.  Development 108: 185-189.
	C35	Picdrahita et al., 1997. Advances in the generation of transgenic pigs via embryo-derived and primordial germ cell-derived cells. J Reprod Fertil 52 (suppl):245-254.
	C36	Polejaeva et al., 2000. Cloned pigs produced by nuclear transfer from adult somatic cells. Nature 407: 86-90.
	C37	Resnick et al., 1992. Long-term proliferation of mouse primordial germ cells in culture. Nature 359:550-551.
	C38	Rossant, Janet 1993. Immortal germ cells?. Current Biology, 3, 1: 47-49
	C39	Salter et al., 1986. Gene insertion into the chicken germ line by retroviruses. Poultry Science 65: 1445-1458.
	C40	Sang, H. 1994. Transgenic chickens—methods and potential applications. Tibtech 12: 415-420.
	C41	Shim et al., 1997. Isolation of pluripotent stem cells from cultured porcine primordial germ cells. Biol Reprod 57:1089-1095.
	C42	Shuman, R.M. 1991. Production of transgenic birds. Experientia 47: 897-905
	C43	Squires et al., 1994. Transgenic chickens by liposome-sperm-mediated gene transfer. Proceedings of the 5th World Congress on Genetics Applied to Livestock Production. 21: 350-353.
	C44	Tsukui et al., 1996. Transgenesis by adenovirus-mediated gene transfer into mouse zona-free eggs. Nature Biotechnology 14: 982-985.
	C45	Vick et al., 1992. Transgenic birds from transformed primordial germ cells. Dept of Pure and Applied Zoology, School of Animal and Microbial Sciences, University of Reading Reading RG62AJ, U.K., 179-182
	C46	Vick et al., 1993. Germ-line chimaeras can produce both strains of fowl with high efficiency after partial sterilization. J. Reprod. Fert. 98: 637-641.
	C47	Wakayama et al., 1998 Full-term development of mice from enucleated oncytes injected with cumulus cell nuclei. Nature 394: 369-394
	C48	Watanabe et al., 1994. Liposome-mediated DNA transfer into chicken primordial germ cells in vivo. Molec. Reprod. Devel. 38: 268-274.
	C49	Westphal, H. 1989. Molecular genetics of development studied in the transgenic mouse. Annu. Rev. Cell Biol. 5: 181-196.
	C50	Wilmut et al., Viable offspring derived from fetal and adult mammalian cells. Nature 385: 810-813.
	C51	Wong et al., 1999. Generation of transgenic poultry by transfection of primordial germ cells. In: Transgenic Animals in Agriculture. CAB International. pp. 117-129.
im	C52	Yasuda et al., 1992. A method to obtain avian germ-line chimaeras using isolated primordial germ cells. J. Reprod. Fert. 96: 521-528
* а сору	of this re	eference is not provided as it was previously cited by or submitted to the office in a prior application,

\*a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, U.S.S.N. , filed , and relied upon for an earlier filing date under 35 U.S.C. §120 (continuation, continuation-in-part, and divisional applications).

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w	C54	Etches	, et al. (1997	). "Strategies f	for the producti	on of transgenic chicken	s" Methods in	Molecula	r Biology <u>62</u>	2:433-450.
w	C55 International Search Report for PCT US 02/00429, mailed August 7, 2002.									
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INFORMATION DISCLOSURE	First Named Inventor	Baguisi					
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			U.S.	PUBLISHED APPLICATION DOCUMENTS	1.11		195
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		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Exam Initials ,	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.	
in	C56	Baguisi, et al., Theriogenology, Abstract, 57(1):775 (2002).	
M	C57	Bresler, et al., British Poultry Science, 35:241-247 (1994).	
W	C58	Ebert, et al., Theriogenology, Abstract, 57(1):564 (2002).	
W	C59	Furuta, et al., Asian-Aus. J. Anim. Sci., 12(8):1188-1191 (1999).	
W	C60	Ono, et al., Anim. Sci. Technol. (Jpn.), 69(6):546-555 (1998).	
m	C61	Vick, et al., Proc. R. Soc. Lond. B., 251:179-183 (1993).	

\* a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No.\_\_\_\_\_\_, filed \_\_\_\_\_\_\_, and relied upon for an earlier filing date under 35 U.S.C. §120 (continuation-in-part, and divisional applications).

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